DOCUMENT RESUME

ED 100 437 JC 750 066

TITLE	Northland Pioneer College Manpower Planning Resource Document.
INSTITUTION	Northland Pioneer Coll., Holbrook, Ariz.
PUB DATE	Jan 74
NOTE	42p.
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	*American Indians; Aspiration; Community Development; Educational Opportunities; *Junior Colleges; *Manpower Development; Minority Groups; *Occupational Surveys; Rural Education; Rural Population; Unemployment; *Vocational Education
IDENTIFIERS	Arizona; Navaho County

ABSTRACT

Alternatives for occupational curricula at Northland Pioneer College are discussed in relation to Navaho County economic resources. Approximately 85 percent of the occupations in Navaho County do not require the baccalaureate degree and thus fall within the realm of community college educational responsibility. Because of the sparse population, the limited resources, the extreme distances between communities, and a lack of a center of population, the following recommendations are made: (1) learning centers should be established in several communities; (2) a core curriculum of information necessary in a variety of occupations should be developed; (3) specialized education should be organized so it may be taught in concentrated sessions; (4) cooperative education and shared facilities with high schools should be exploited; (5) the availability of educational opportunities to the people must be placed in high priority. Programs in business, automotive, heavy equipment maintenance, construction trades, and health must be offered. These recommendations are based on existing information on occupations and manpower needs in the county, white and nonwhite (Indian) population distribution, and a previous aspiration study of high school students. (Author/MJK)

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NORTHLAND PIONEER COLLEGE

MANPOWER PLANNING RESOURCE DOCUMENT

DECEMBER 1973

JANUARY 1974

NAVAJO COUNTY

ARIZONA

JC 750 066

December 6, 1973

Mr. Edwin Sorensen, President
Northland Pioneer College
P.O. Box 358
Holbrook, Arizona 86025

President Sorensen:

In accordance with your request of August 15, 1973, I submit the Manpower Planning Resource Document. This information is made available for steering committees, faculty, and interested students for use in future planning.

If this document is to be used effectively, it must be continually updated and improved.

Sincerely,

Gordon L. Snowbarger
Coordinator of Community Resources

GLS:sw

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INTRODUCTION

The purpose of this report is to consider NPC's responsibility to Navajo County for human resource development. Existing information from secondary sources has been compiled and synthesized for use by Northland Pioneer College planners in building curriculum and programs.

This study will be an ongoing plan and new information will be added as it is available. One primary resource document used to obtain information for this study is a Student Needs Questionnaire submitted to all Navajo and Apache County High School Students during Fall of 1973. Other primary studies will be made or are under consideration at this time for the purpose of studying employer needs, desires and opinions.

An attempt has been made to relate History, Statistics and Projections for Navajo County into a comprehensive plan for Northland Pioneer College for the Development of Human Resources.

NORTHLAND PIONEER COLLEGE MANPOWER PLANNING RESOURCE DOCUMENT

Navajo County, its History and Statistics as they Pertain to Manpower Planning

Navajo County is a rural county located in the Northeast Section of Arizona. The county is 40 to 50 miles wide and 225 miles long. Because of the primitive roads on the Indian reservations and the mountainous and desert terrain that make up Navajo County, it is necessary to travel over 300 miles to reach one end of the county from the other end of the county. Almost 70% of Navajo County has been designated as Indian reservation land. In the 18% of the privately owned land there are 17 small communities; Winslow, Joseph City, Holbrook, Snowflake, Taylor, Heber, Show Low, Lakeside, Pinetop, Overgaard, Clay Springs, Aripine, Pinedale, Linden, Shumway, Woodruff and Sun Valley. The population of each of these communities is shown in Table I. See Page 2.

Current employment in Navajo County is 13,350. The number of people employed in the respective occupations can be examined in Exhibit "A".

The Community College has traditionally served society by offering education and training in those occupations requiring less than a baccalaureate degree. According to the figures in Exhibit "A" approximately 85% of the occupations in Navajo County do not require the baccalaureate degree and thus fall within the realm of community college educational responsibility.

Occupational categories that require the attention of Northland Pioneer College would be the following:

Retail Managers and Sales Occupations - 14% of the people employed in the county are employed in this category. If we eliminate the professional people, this means that 20% of all of the occupations within the community college responsibility fall in this category.

Automotive and Mechanical - Approximately 3% or 360 of the counties' employed persons work in this area.

Service Related Occupations, Cleaning, Food and Health - Nearly 1,200 people are employed in this area representing 11% of the occupations in the community college area of responsibility.

Office and Clerical Occupations - 1,517 people are employed in these occupations representing over 16% of the employed people in the area of community college responsibility.

Construction and Craftsmen - 619 people are employed in this area representing 6% of the employed people in the area of community college responsibility.

TABLE I

POPULATION - NAVAJO COUNTY (Off Reservation)

	1970	1972	1973
Winslow	8,066	8,009	7,478
Joseph City	800	N/A	N/A
Holbrook	4,759	N/A	4,944
Show Low	2,129	N/A	2,790
Snowflake	1,977	N/A	2,189
Taylor	888	N/A	N/A
Heber	960	N/A	N/A
Pinetop-Lakeside	1,900	N/A	3,000
Sun Valley	125	N/A	N/A
Woodruff	140	N/A	N/A
Shumway	50	N/A	N/A
Aripine	50	N/A	N/A
Pinedale	100	N/A	N/A
Clay Springs	230	N/A	N/A
Linden	50	N/A	N/A
Overgaard	175	N/A	N/A
Total Population Estimate of Navajo County			54,100

Transportation, Equipment and Operatives - 624 are employed representing almost 7% of the community college area responsibility. (Employment projections by Industrial Classification can be examined in Table II, Page 4)

In order to determine the exact job titles and the skills necessary for those jobs, a needs study will have to be undertaken within each of the communities. As of the time of writing of this report a process has been identified through which this can take place and is hoped that by Fall of 1974 this information will be available.

A detailed list of the number and types of businesses can be found in Exhibit "B".

Demographic Analysis of College District

School enrollment is on the increase in all grades in Navajo County. The enrollment figures for 1973 are as follows:

9th Grade	10th Grade	11th Grade	12th Grade
1157	1007	849	774

New school facilities are under construction in Lakeside-Pinetop and Joseph City.

The general population estimate of the College District by white and non-white can be found in Exhibit "C". This Exhibit also shows the breakdown by Age Distribution.

Major Challenges

The following represents several of the challenges that Northland Pioneer College must face in establishing a Manpower Development Program that will serve the needs of the people of Navajo County.

1. Navajo County is a rural county. There is no center of dense population. The county has 5.5 people per square mile. The various occupational opportunities are scattered throughout the county. Exhibit "B" shows the detailed list of businesses. The number of people in each kind of occupation are few. Programs designed to train large numbers of people with specific skills would not be able to offer employment as a payoff for enrolling in the training program. Travel between the many points in Navajo County is a way of life and is complicated by poor and often impassable roads. The weather conditions during the winter often prevent travel.

2. There is a lack of educational opportunity. Although it has been reported that 50% of the high school graduates attempt a

NAVAJO COUNTY

PROJECTED EMPLOYMENT

BY

INDUSTRIAL CLASSIFICATION

	1970	1971	1972	1973*	1974*	1975*	1976*	1977*
Manufacturing	1638	1225	1200	1236	1236	1317	1317	1328
Mining	101	175	-	200	200	200	200	200
Contract Construction	998	475	600	660	1175	1500	1700	1800
Transportation	1500	1375	1400	1442	1445	1530	1580	1627
Wholesale and Retail	2238	2000	2175	2284	2398	2518	2644	2776
Finance, Ins., & Real Estate	221	200	-	206	212	218	224	230
Services	1607	2100	2725	3155	3344	3511	3616	3725
Government	2632	3250	3475	3553	3766	3916	4073	4236
Agriculture	452	225	200	200	200	215	220	240
Other Non Agriculture	229	1100	1125	1130	1135	1200	1200	1205
Not Classified	237	-	450	-	-	-	-	-
TOTAL EMPLOYMENT	11853	12125	13350	14066	15111	16125	16774	17367
% Increase		.02	.10	.05	.07	.07	.04	.04

* Projected

post-secondary educational experience, a study of high school seniors indicated that only 29% planned to continue their education at a four year college or university and 37% indicate they do not plan any further schooling, or the postponement of further schooling, for a few years. This means that there is a potential of 71% of the high school population who could profit from community college experience.

3. The job market in Navajo County is characterized by many small independent businesses each employing from one to seven people, see Exhibit "D". A large variety of job knowledge and skills is required in order to serve all of these occupations. The major employer in Navajo County is Government, employing 26.8% of the labor force. The Wholesale, Retail, Finance, and Services sector employ 35.5% of the labor force. Public Utilities, Transportation and Communications employ 11.3% and Manufacturing in Navajo County employs 10.1% of the labor force.

   A list of the larger employers in Navajo County would include the following:

   Santa Fe Railroad
   The BVD Company (Apparel Industry)
   Duke City Lumber Company
   Arizona Public Service
   Southwest Forest Industries
   Sitgreaves National Forest
   Western Pine Sales, Inc. (Lumber)
   Western States Telephone Company, Inc.
   Local and City Government
   Public Schools of Navajo County
   Fort Apache Timber Company
   Three (3) Area Hospitals
   United States Government
   Navopache Electric Cooperative

   When we add the major employers to the many small businesses and firms, we find that the job market in Navajo County is quite diversified. Education and training in a few specialized areas would soon saturate the job market for that particular occupational skill.

4. 12.3% of the original enrollees in 9th, 10th, 11th and 12th grades in 1972-73 withdrew prior to the end of the school year and did not re-enter. If present trends hold, 462 of the 1157 9th graders will drop out prior to graduating as seniors in 1976. According to a Northern Arizona Council of Government's Report, 58% of the adults over 25 years of age in Navajo County have less than a high school education.

5. There are three Indian tribes living on reservations in Navajo County: Apache, Hopi and Navajo. 49% of the population or

22,948 are Indian. Indian Manpower Development is different. The Indian people have lived primarily on a subsistence economy characterized by low capital investment, do it yourself methods, and low levels of productivity. A money economy puts a high premium on managerial skill, proficiency in using capital and labor, and ambition to get ahead. People who must shift from one economy to another must go through a marked change in values.

Some of the cultural patterns of the Indians cause difficulties that Manpower Planners must take into account. Income sharing by families is present on almost all Arizona reservations. Whenever members of an extended family unit have income, they share it. Relatives with no income will move in with relatives who have income. Because of this practice, it is difficult to get Indians to work in an unsheltered labor market.

Previous dominant Federal Policy has been to educate Indians to get them off the reservations and into the American Mainstream. This policy has failed. The new emphasis is to bring industry to the reservation and allow the Indians to remain at home.

The unemployment rate on the Apache Reservation is over 50%, but only 3.4% of the indians are actually looking for work. This situation also exists on the other two reservations.

6. Travel Requirements are a major challenge. As previously reported, Navajo County is a long narrow county and many areas of the county cannot be reached without going through other Arizona counties. From Alchesay High School at Whiteriver to Monument Valley High School in Kayenta, one would have to travel over 300 miles. Approximately 80 of these miles would be outside of Navajo County.

7. Family income deficiencies create another challenge. The Median Family Income of Navajo County Families is $6,849.00 compared to a State Median Family Income of $9,187.00. Because of the vast geographical area and the spreading out of many small firms, it is difficult for more than one family member to obtain a job in any one particular community. In families where more than one person works, it is common for at least one of the working members of the family to drive several miles to neighboring communities in order to find employment. 32% of the families in Navajo County have incomes at or below the poverty level. 26% of those families have incomes less than 75% of the poverty income amount. The family income comparisons for Navajo County and the State of Arizona are indicated in the following Table.

TABLE III

INCOME DISTRIBUTION

	NAVAJO COUNTY		STATE OF ARIZONA	
Amount	Number of Families	% of Total	Number of Families	% of Total
0 - 3000	2530	26%	46,810	11%
3001 - 6000	1764	18%	74,184	17%
6001 -10,000	2491	26%	122,657	28%
10,001 -15,000	2026	21%	113,236	26%
Over -15,000	927	9%	81,502	18%
	9738	100%	438,389	100%
Median Family Income.....	$6,849		.....	$9,187

8. The unemployment rate in Navajo County is 4.5%. This figure, however, is misleading when you look at the unemployment rate of young people between the ages of 16 and 24. Over 80% of unemployed fall within this age bracket.

   With the number of young people who are dropping out of high school and those who do not plan on continuing with a post-secondary educational experience, the unemployment of the young people in Navajo County becomes a major challenge.

   The total employed men and women in Navajo County is 13,350, see Exhibit "E". This Exhibit also shows the total unemployed by Age Distribution.

   Since 48.2% of the population is Indian, we must take a close look at the Indian unemployment rate which runs considerably higher than the reported rate for the county. Unemployment on the reservations is between 35% and 65% depending on which reservation and what area of the reservation is being studied. Many of these people are never reported as being unemployed since they are not seeking employment. Most of these people would work, however, if jobs were available in locations convenient for them.

Goals for Northland Pioneer College

1. To provide the opportunity for vocational/technical and semi-professional programs for students now employed or who are contemplating employment in business, government or industry, upon completion of their work at Northland Pioneer College.

2. To provide the program of university parallel courses acceptable at universities in Arizona for a transfer to a maximum of 64 semester hours.

3. To provide the opportunity for continuing education for the people of Navajo County.

4. To provide enrichment programs which will be preparatory or supplemental to employment for people with special needs.

Alternatives for Occupational Education Opportunities in Navajo County

I. To offer classes in every occupational category of employed people in Navajo County.

Advantages:

(1) This would insure educational opportunity for all employed persons in Navajo County.

(2) This alternative will enable young adults and employed persons to receive education and training in the actual Navajo County Occupational Categories.

(3) A variety of occupational choices for potential students would be assured.

Disadvantages:

(1) Some occupations are declining in job opportunity.

(2) Opportunities in many categories are limited.

(3) The cost of providing extensive offerings would be exorbitant because of the small classes in many locations and the need of many specialists.

(4) Some job categories are out of the realm of the community college educational effort.

II. To offer vocational/technical programs not available in other community colleges in Arizona.

Advantages:

(1) This would offer programs to people of other counties in the State of Arizona for opportunities not currently available to them.

(2) There would be no competition for students in each of these programs as Northland Pioneer College would be the only college offering the said program.

(3) Employment opportunities would be inhanced because of the lack of training throughout the rest of the State.

(4) These programs would be easy to sell to Manpower Planners at the State and National level due to the fact that training opportunities are not available in other locations.

Disadvantages:

(1) This alternative would limit the opportunity of local people to attend school in their local community if they wanted programs currently offered by other community colleges.

(2) This alternative would not serve the employment needs of local industry, except on a minute basis.

(3) Local tax money would be expended to train people for jobs in other parts of the state and nation.

III. To offer vocational/technical education in occupations desired by potential students.

Advantages:

(1) Student recruitment problems would be reduced in that all programs desired by students would be offered at Northland Pioneer College.

(2) Local patron satisfaction would be enhanced by being able to find the programs desired in the immediate area.

(3) Program decision making would be easy on the part of planners. Programs offered would be based on the popularity indicated by potential students.

Disadvantages:

(1) Job opportunities may not be available in job categories popular with prospective students.

(2) Many of the popular choices of students are popular because of the lack of career information possessed by prospective students.

(3) The more glamorous programs would receive the most emphasis on the part of students and the community college and would be unrealistic relative to occupational needs.

IV. To offer occupational programs desired by local industries to supplement local Manpower Deficiencies.

Advantages:

(1) The job market would be a realistic one.

(2) Local business and industry support would be favorable.

(3) The program would serve local industrial needs and would further emphasize the localized reason for the college's existence.

Disadvantages:

(1) Local industries often exaggerate local needs.

(2) Local needs are sometimes in the area of the lower paid, lower status occupations not absolutely needing the education and training offered by a community college.

(3) Local needs and Manpower Deficiencies are often not balanced with prospective student needs, therefore, are unrealistic in the eyes of prospective students.

V. To offer programs and classes in job cluster area to be determined by a consensus of input from potential students, lay advisory groups, and professional educators.

Advantages:

(1) This will increase the flexibility of the opportunities available to students upon completion of their programs at Northland Pioneer College.

(2) The student completing a program will have skills general enough to be used either in Navajo County or other parts of the state as he or she desires.

(3) This alternative provides for a balance of program effort based upon the input of several groups.

Disadvantages:

(1) Students will not have the skill level possible in a highly specialized program.

(2) The programs will not always relate to student and industry desires.

(3) Recruitment of potential students and selling of the graduates become vital functions in order to make the program work.

(4) This alternative assumes that some career education has taken place.

VI. To offer all vocational/technical occupational programs on one campus centrally located in Navajo County.

Advantages:

(1) The administration of such an institution would be a simple process.

(2) Decisions regarding facilities would be easily based upon need and program selection.

(3) Potential students would be assured that programs would be offered at one location and that adequate facilities would be available.

(4) All traditional concepts of post-secondary community college education could be implemented.

Disadvantages:

(1) The population in Navajo County is spread out to an extent that it would require the majority of students to travel to the central campus.

(2) Tax payers at each end of the tax paying county would be opposed to paying for buildings and facilities located away from their own community.

(3) Studies have predicted the growth pattern to be in the southern part of the county and that growth is expected to be 150% or larger, however, growth patterns in the northern part of the county are predicted to be 50% and the reasons for that growth are not completely understood or defined at this time.

(4) There is a continued trend in all community colleges towards off campus enrollment.

VII. To offer all vocational/technical programs in all communities in Navajo County.

Advantages:

(1) This alternative will bring educational opportunity to the people.

(2) Fewer people will be required to travel and thus current and projected energy and fuel shortages will create less inconvenience on the part of potential students.

(3) Each community will have its own identifiable part of the community college and thus the community college will be easily identified with each community.

(4) Potential and unpredictable growth patterns will be more ably taken care of through the expansion of existing "mini centers".

Disadvantages:

(1) The traditional concept of the community college campus atmosphere may be reduced.

(2) Scheduling of programs and classes will be complicated.

(3) Classes will be smaller requiring increased costs for instruction.

(4) Faculty will be required to travel.

Recommendations

Because of the sparse population, the limited resources, the extreme distances between communities, and a lack of a center of population density in Navajo County, the following recommendations are made.

1. Many learning centers should be established in several communities. These "mini centers" should be allowed to grow with the need and the use demonstrated in each community.

2. Curriculum should be developed that would represent a core of information necessary in a variety of occupations. This is necessary to add flexibility to the program completor's job possibilities as well as to economize on the cost of the course offerings.

3. Specialized education and training should be organized so that it can be taught in concentrated sessions. Mobile labs should be used wherever possible to bring the instruction to each community for blocks of time during each session. Where mobile labs are not feasible, laboratory classes should be scheduled so that travel is held at a minimum. Students should not be expected to travel over 30 miles one way, more than two times per week. Six to eight hour lab sessions could reduce this travel to one trip per week.

4. The "mini center concept" raises problems for laboratory classes that can be partially overcome by developing a quality cooperative education program. Full utilization of each community's facilities can be gained with this approach.

5. Attempts should be made to get increased use of high school laboratory facilities. College labs could be scheduled in late afternoon and evening hours. College students will have to adjust to these hours if duplication of laboratory facilities is to be avoided. Agreements for joint use must be established between college and high school governing boards.

6. Some duplication of programs available in community colleges in other counties must take place. The availability of educational opportunity to the people of Navajo County must be placed as a high priority. Programs in business, automotive, heavy equipment maintenance, construction trades, and health must be offered.

7. Smaller class sizes can be expected with the "mini center concept". The increased costs resulting from class size must be measured against the savings and benefits related to student travel, facility construction, increased educational availability, and community pride.

8. Follow-up and Evaluation of product and impact of occupational programs at Northland Pioneer College must be established on a continuing basis. Graduates and program completors must be measured against community need and community demands on a bi-monthly basis. The job slots are limited and varied to the extent that immediate modification in student programs must be possible.

EXHIBIT "A"

OCCUPATION	1970	NAVAJO COUN
Total employed 16 years old and over:	11,853	
Professional, technical, and kindred workers		1,722
Engineers		142
Physicians, dentists, and related practitioners		71
Health workers, except practitioners		118
Teachers, elementary and secondary schools		727
Technicians, except health		94
Other professional workers		570
Managers and administrators, except farm		1,468
Salaried: Manufacturing		43
Retail trade		284
Other industries		755
Self-employed: Retail trade		233
Other industries		153
Sales workers		471
Retail trade		359
Other than retail trade		112
Clerical and kindred workers		1,517
Craftsmen, foremen, and kindred workers		1,858
Automobile mechanics, including body repairmen		186
Mechanics and repairmen, except automobile		212
Metal craftsmen, except mechanics		46
Construction craftsmen		619
Other craftsmen		795
Operatives, except transport		1,008
Durable goods manufacturing		218
Nondurable goods manufacturing		309
Nonmanufacturing industries		481
Transport equipment operatives		624
Laborers, except farm		936
Construction laborers		170
Freight, stock, and material handlers		218
Other laborers, except farm		548
Farmers and farm managers		118
Farm laborers and farm foremen		177

	NAVAJO COUNTY
Service workers, except private household	1,712
Cleaning service workers	367
Food service workers	556
Health service workers	171
Personal service workers	319
Protective service workers	124
Private household workers	242
Female employed, 16 years old and over:	
Professional, technical; and kindred workers	676
Nurses	82
Health workers, except nurses	16
Teachers, elementary and secondary schools	439
Technicians, except health	-
Other professional workers	139
Managers and administrators, except farm	322
Sales workers	263
Retail trade	224
Other than retail trade	39
Clerical and kindred workers	1,160
Bookkeepers	230
Secretaries, stenographers, and typists	265
Other clerical workers	665
Craftsmen, foremen, and kindred workers	32
Operatives, except transport	262
Durable goods manufacturing	13
Nondurable goods manufacturing	161
Nonmanufacturing industries	88
Transport equipment operatives	21
Laborers, except farm	28
Farmers and farm managers	51
Farm laborers and farm foremen	17
Service workers, except private household	1,062
Cleaning service workers	122
Food service workers	435
Health service workers	162

	NAVAJO COUNTY
Personal service workers	248
Protective service workers	6
Private household workers	242
Total Male employed 14 and 15 years old	106
White-collar workers	21
Blue-collar workers	55
Farm workers	9
Service workers, including private household	21
Female employed, 14 and 15 years old:	
White-collar workers	9
Blue-Collar workers	-
Farm workers	-
Service workers, except private household	42
Private household workers	-
INDUSTRY	
Employed 16 years old and over:	
Agriculture, forestry, and fisheries	452
Mining	101
Construction	998
Manufacturing	1,638
Furniture and lumber and wood products	586
Metal Industries	14
Machinery, except electrical	4
Electrical machinery, equipment, and supplies	4
Transportation equipment	5
Other durable goods	175
Food and kindred products	39
Textiles and fabricated textile products	174
Printing, publishing, and allied industries	35
Chemicals and allied products	-
Other nondurable goods (incl. not specified mfg. indus)	602

	NAVAJO COUNTY
Railroads and railway express service	988
Trucking service and warehousing	77
Other transportation	49
Communications	105
Utilities and sanitary services	281
Wholesale trade	214
Food, bakery, and dairy stores	323
Eating and drinking places	425
General merchandise retailing	235
Motor vehicle retailing and service stations	443
Other retail trade	598
Banking and credit agencies	85
Insurance, real estate, and other finance	136
Business and repair services	220
Private households	183
Other personal services	618
Entertainment and recreation services	108
Hospitals	304
Health services, except hospitals	174
Elementary, secondary schools, and colleges - private	152
Elementary, secondary schools, and colleges - government	1,399
Other education and kindred services	38
Welfare, religious, and nonprofit membership organizations	237
Legal, engineering, and miscellaneous professional services	229
Public administration	1,043
Employed, 14 and 15 years old:	
Agriculture	13
Nonagriculture industries	144
Male employed, 16 years old and over:	
Agriculture, forestry, and fisheries	368
Mining	1,071
Manufacturing	1,370
Furniture and lumber and wood products	556

	NAVAJO COUNTY
Metal industries	14
Machinery, including electrical	8
Transportation equipment	5
Other durable goods	160
Food and kindred products	33
Textiles and fabricated textile products	28
Printing, publishing, and allied industries	29
Other nondurable goods (incl. not specified mfg. indus)	537
Transportation	1,037
Communications, utilities, and sanitary services	288
Wholesale trade	184
Food, bakery, and dairy products	170
Eating and drinking places	124
Other retail trade	784
Finance, insurance, and real estate	93
Business and repair services	190
Personal services	170
Entertainment and recreation services	70
Health services, including hospitals	134
Elementary, secondary schools, and colleges - government	572
Elementary, secondary schools, and colleges - private	76
Other education and kindred services	-
Other professional and related services	275
Public administration	741
Male employed, 14 and 15 years old:	
Agriculture	13
Nonagriculture industries	93

EXHIBIT "B"

NAVAJO AND APACHE COUNTIES

DETAILED LIST OF BUSINESSES

	NAVAJO COUNTY	APACHE COUNTY
Accountants (Certified)	5	
Accountants (Public)	6	1
Adjusters	2	
Air Conditioning Contrs.	4	
Air Conditioning - Repair	3	
Aircraft Charter	1	1
Air Line Companies	1	
Ambulance Service	2	
Mortuarys	1	1
Office Supply	1	1
Antique Dealers	4	
Art Galleries	3	
Artists' Materials & Supplies	1	
Asphalt & Asphalt Products	1	
Attorneys	13	1
Auto-Body	13	2
Auto-Dealers	16	3
Auto-Dealers (Used)	3	
Auto-Electric Equipment	1	
Auto Supplies (New)	10	5
Auto-Wreckers	4	1
Auto-Leasing	3	
Auto-Repair	28	6
Bakers	4	
Banks	9	2
Beauty Salons	26	4
Bookkeeping Service	2	
Brake Service	3	
Building Contrs.	8	1
Building Supply (Lmbr. Supply)	7	1
Bus Lines	5	
Cabinet Makers	2	
Camper Sales	1	
Campgrounds	5	1
Camps	1	1
Carpet - Rug Dealers	7	1
Cement - Retail	1	
Child Care Centers		1
Ceramic Products	2	
Chamber of Commerce	3	1
Chiropractors	7	1
Church Organizations		
Churches	66	7
Cinders	3	

	NAVAJO COUNTY	APACHE COUNTY
Cleaners	8	1
Clinics	12	
Clubs	5	
Cocktail Lounges	15	2
Concrete Products	10	1
Concrete - Ready Mix	1	
Credit Unions	3	
Curios	10	
Dairies	5	
Dairy Products - Retail	3	
Dairy Products - Wholesale	1	
Data Processing Service	2	
Day Nurseries	2	
Dentists	14	2
Dentists (Orthodontists)	1	
Department Stores	14	1
Dog & Cat Grooming	1	
Dormitories	2	
Dry Wall	1	
Electric Appliances - Major	2	
Electric Contractors	12	1
Electric Light & Power Companies	7	1
Employment Agencies	2	
Engineers - Agricultural	1	
Engineers - Civil	2	
Engineers - Consulting	3	
Engineers - Photogrammetric (Out of Phoenix)		
Escrow Service	4	
Excavating Contractors	8	3
Exterminating & Fumigating	2	
Fabric Shops	4	
Feed Dealers	13	2
Fence Co.	1	
Financing	1	
Fire Depts.	10	5
Florists	5	1
Fraternal Organizations	8	
Funeral Directors	1	
Garbage Collection	1	
Gas Co.	2	
Gas - Liquefied Petroleum (Bottled and Bulk)	4	2
American Oil Products (Gasoline - Wholesale)	4	2
General Contractors	25	3
General Merchandise (Retail)	5	1

	NAVAJO COUNTY	APACHE COUNTY
Gift Shops	8	1
Glass - Auto, Plate, Window, Etc.	4	
Grocers - Retail	36	8
Hardware - Retail	3	
Heating Contractors	5	
Heating Equipment	4	
Hospitals	4	1
Hotels	15	
Humane Societies	1	
Insurance	36	4
Janitors' Supplies	1	
Jewelers	6	1
Kennels	2	
Labor Organizations	2	1
Ready to Wear (Ladies)	10	
Laundries	5	1
Laundries (Self Service)	10	3
Lawyers	4	
Libraries	4	
Liquors	10	
Lenses	1	
Linen Supply Service	1	
Linoleum Dealers	1	
Loans	4	
Locksmiths	3	
Lumber Supplies (Retail)	13	3
Machine Shops	3	
Mail Order Distributors	4	1
Mason Contrs.	1	
Medical Clinics	1	
Men's Clothing	2	
Missions	4	
Mobile Home Dealers	8	1
Mobile Home Parks	17	5
Mortgages	1	
Motels	83	15
Motorcycles	2	
Moving & Storage	5	1
Museums	1	
Musical Instruments - Dealers	1	1
Musical Instruments - Repairing	1	
Newspapers	7	
Notaries (Public)	4	
Office Supplies	1	
Oil Marketers	11	4
Optometrists - O.D.	7	
Paint (Retail)	8	
Painting Contractors	13	1
Parks	1	
Paving Contractors	3	

	NAVAJO COUNTY	APACHE COUNTY
Pest Control	2	
Pet Shops	1	
Pharmacies	8	1
Photographers	2	
Physicians & Surgeons, M.D.	12	3
Pipe Cutting & Threading	1	
Pipe Line Contractors	1	
Pizza Restaurants	3	
Plumbing Contractors	8	
Plumbing - Drain & Sewer Cleaning	4	
Plumbing - Fixtures & Supplies (New-Retail)	3	1
Police Depts.	9	3
Poultry Equipment & Supplies	1	
Printers	6	
Pumps	5	
Radio Service	3	1
Radio Stations	4	
Railroads	4	
Ranches	6	6
Real Estate	46	6
Recreation Centers	1	
Real Estate Developers	3	1
Refrigeration Service	2	
Refrigerators & Freezer Services	6	1
Remodeling Contractors	1	
Resorts	28	18
Rest Homes	2	
Restaurants	53	7
Road Building Contractors	3	
Road Service (Automotive)	9	
Rock Shops	2	1
Roofing Contractors	1	
Roofing Materials	1	
Safes and Vaults	1	
Savings and Loan Associations	1	
Sand and Gravel	6	
Sanitation Service		1
Saws	2	
Sawmills	1	2
Schools	13	6
Septic Tanks (Service)	5	3
Septic Tank (Cleaning)	5	
Service Stations	103	18
Sewing Machine Centers	5	
Sheet Metal Work	2	
Shoe Repairing	3	1
Shoes (Retail)	1	
Sign Companies	3	
Silversmiths	1	

	NAVAJO COUNTY	APACHE COUNTY
Skiing Resorts	1	
Snow Vehicles	4	
Social Service Organizations	2	
Sporting Goods - Retail	5	6
Surveyors - Land	2	1
Taverns	8	2
Tax Return Preparation	7	
Taxicabs	2	
Taxidermists	2	
Telegraph Companies	1	
Western States Telephone Co. (Communities Served)	7	4
Television CATV Companies (Offices)	2	
Television Dealers	2	2
Television Service	7	2
Theatres	4	1
Tire Dealers	19	5
Title Companies	1	1
Trading Posts	13	
Truck Dealers	4	4
Upholsters	5	1
Variety Stores	5	1
Veterinarians D.V.M.	2	1
Water Companies	3	
Water Well Drilling	4	1
Welding	6	
Wrecker Service	16	3

EXHIBIT "C"

General Population of the College District by - White and Non-white
July 1, 1973

APACHE COUNTY

All Races	White	%	Total	%	Indian	%	Negro	%	Other	%	Spanish Heritage	%
37,500	9,100	24.3	28,400	75.7	28,000	74.7	400	1.1	Less than 15		2,800	7.5

NAVAJO COUNTY

54,100	26,700	49.4	27,400	50.6	26,100	48.2	1,200	2.2	100	.2	6,100	11.3

General Population of the College District by Age Distribution:

	Apache County	Navajo County
(1) 16 through 21 years	3,885	5,435
(2) 22 through 44 years	8,460	12,775
(3) 45 years and over	5,810	7,417

(24)

EXHIBIT "D"

BUSINESS ESTABLISHMENTS AND EMPLOYMENT IN ARIZONA

	County	Number of Establishments	Number of Employees	Average Employment Per Establishment
(A)	Apache	210	4,309	21
(B)	Navajo	601	6,266	10
(C)	State Total	32,249	502,991	16

Number of Establishments by Employment-Size Class

	1-7	8-19	20-49	50-99	100-499	500 & More
(A)	133	46	15	9	5	2
(B)	436	106	42	9	7	1
(C)	22,089	5,944	2,700	876	553	87

	County	Agriculture & Forestry	Mining	Contract Construction	Manufacturing	Transportation & Utilities
(A)	Apache	1	2	13	17	7
(B)	Navajo	2	5	48	30	33
(C)	State Total	418	139	3,316	1,729	840

	Wholesale Trade	Retail Trade	Finance Ins. & R. E.	Services	Unclassified
(A)	9	84	10	63	4
(B)	23	266	27	163	4
(C)	2,390	9,009	2,807	10,285	1,316

EXHIBIT "D" (PAGE 2)

COUNTY EMPLOYMENT BY INDUSTRY IN ARIZONA

	County	Agriculture & Forestry	Mining	Contract Construction	Manufacturing	Transportation & Utilities
(A)	Apache	W	W	58	621	259
(B)	Navajo	W	W	346	1,286	487
(C)	Total	3,341	20,486	51,213	94,167	27,002

	Wholesale Trade	Retail Trade	Finance Ins. & R. E.	Services	Unclassified
(A)	59	692	117	2,459	W
(B)	330	1,941	225	1,516	W
(C)	29,982	121,713	39,428	109,051	6,608

EXHIBIT "E"

1972

	NAVAJO COUNTY	APACHE COUNTY
Employment Total (Men and Women)	13,350	8,475
Total Unemployed	625	450
Male - 16 Years and Older	393	N/A
Female - 16 Years and Older	232	N/A
Male - 16 to 21 Years	348	N/A

EXHIBIT "F"

RESULTS OF 1973 SURVEY CONCERNING EDUCATIONAL ASPIRATIONS
OF HIGH SCHOOL STUDENTS IN NAVAJO AND APACHE COUNTIES

Seniors	827
Juniors	871
Sophomores	726
Freshmen	892
TOTAL	3316

	SENIORS		JUNIORS		ALL STUDENTS	
	No.	Per cent	No.	Per cent	No.	Per cent
Do not plan further schooling,	84	10	116	13	400	12
Expect to postpone education,	212	26	208	24	691	21
Will continue education.	529	64	546	63	1724	52
If continuing, will attend:						
Vocational/technical school,	108	13	92	11	398	12
Northland Pioneer College,	116	14	167	19	621	19
University or college.	238	29	250	29	961	29
Would prefer commuting,	329	40	327	38	1267	38
Would not commute.	338	41	375	43	1355	41
Would attend college in home community,	363	44	365	42	1433	43
Would not attend college in home community.	270	33	276	32	1075	32
Would enroll in university parallel at NPC.	171	21	149	17	702	21
Agricultural Occupations						
Animal Science	34	4	52	6	237	7
Farm Business Management	17	2	15	2	72	2
Agricultural Production	24	3	21	2	95	3

	SENIORS		JUNIORS		ALL STUDENTS	
	No.	Per cent	No.	Per cent	No.	Per cent
Agricultural Mechanics	19	2	18	2	82	2
Forestry	66	8	55	6	263	8
Business Occupations						
Advertising	13	2	7	-	39	1
Finance & Credit	3	-	13	1	29	-
Food Distribution	6	-	6	-	34	1
General Merchandise Retailing	12	1	11	1	39	1
Hotel & Lodging	14	2	13	1	98	3
Insurance	4	-	7	-	38	1
Real Estate	10	1	12	1	43	1
Accounting or Bookkeeping	40	5	49	6	156	5
Business Data Processing	25	3	27	3	76	2
General Office Clerk	38	5	39	4	130	4
Personnel	14	2	20	2	61	2
Secretarial	76	9	106	12	361	11
Typist	39	5	67	8	214	6
Health Occupations						
Dental Technician	41	5	38	4	138	4
Medical Lab Technician	31	4	46	5	147	4
Nursing	83	10	62	7	306	9
Rehabilitation	12	1	9	1	51	2
Radiology (X-Ray)	25	3	24	3	89	3
Environmental Health	11	1	14	2	52	2
Mental Health	29	2	30	3	119	4
Mortuary Science	7	-	16	2	44	1
Home Economics Occupations						
Care and Guidance of young children	46	6	70	8	244	7
Food Management and Production	17	2	29	3	87	3
Home Furnishings, Equipment and Services	32	4	28	3	135	4

	SENIORS		JUNIORS		ALL STUDENTS	
	No.	Per cent	No.	Per cent	No.	Per cent
Technical Occupations						
Automotive Technology	73	9	110	13	340	10
Chemical Technology	6	-	16	2	33	-
Civil Technology	4	-	7	-	21	-
Electrical Technology	10	1	21	2	70	2
Electronic Technology	22	3	36	4	101	3
Industrial Technology	11	1	12	1	48	1
Trade and Industrial Occupations						
Air Conditioning	9	1	5	-	18	-
Appliance Repair	3	-	1	-	10	-
Air Craft Maintenance	15	2	16	2	89	3
Business Machine Maintenance	3	-	2	-	17	-
Commercial Art	14	2	24	3	83	3
Commercial Photography	15	2	26	3	87	3
Carpentry	35	4	58	7	149	4
Electrician	26	3	38	4	121	4
Heavy Equipment	78	9	70	8	268	8
Masonry	5	-	8	-	20	-
Painting & Decorating	18	2	23	3	78	2
Plumbing and Pipefitting	11	1	7	-	32	-
Diesel Mechanics	42	5	45	5	172	5
Drafting	17	2	23	3	81	2
Radio & Television Repair	8	-	16	2	62	2
Graphic Arts	8	-	7	-	37	1
Machine Tool Operation	6	-	7	-	26	-
Welding	46	6	51	6	170	5
Cosmetology	32	4	27	3	87	3
Fireman Training	6	-	7	-	29	-
Law Enforcement Training	34	4	43	5	149	4
Public Service Occupations	12	1	6	-	36	1
Quantity Food Occupations	2	-	2	-	8	-

	SENIORS		JUNIORS		ALL STUDENTS	
	No.	Per cent	No.	Per cent	No.	Per cent
Textile Production and Fabrication	1	-	2	-	9	-
Upholstering	9	1	9	1	23	-
Woodworking	20	2	26	-	99	3
Watch Repair & Gemology	-	-	5	-	15	-

EXHIBIT "G"

1973 - 74

NORTHLAND PIONEER COLLEGE

SURVEY OF COMMUNITY INTEREST

During late 1973 and early 1974, Northland Pioneer College organizers circulated an information brochure which contained a questionnaire in which the citizens of Navajo County might express their views concerning college development. As college planners talked with public and private groups throughout the county, these brochures were distributed. The brochures were also mailed to selected Post Office Box Holders in Navajo County communities.

Citizens could respond to the questionnaire by tearing off the portion including the questionnaire and mailing it to Northland Pioneer College. The respondents were required to pay their own postage. There was no concerted effort on the part of Northland Pioneer College to get returns. It was strictly a voluntary effort on the part of the respondents. Out of 10,000 brochures, 145 have been returned to Northland Pioneer College as of January 31, 1974.

Origin of Returns:

Winslow	40
Holbrook	34
Snowflake	10
Show Low	20
Lakeside	12
Pinetop	8
Kayenta	2
Whiteriver	1
Mc Nary	1
Keams Canyon	1
Globe	1
Other (Not Specified)	15
TOTAL	145

Question No. 1:

Would you attend Northland Pioneer College if you could attend classes in your own community?

	Number	Per cent
Yes	138	95
No	3	2
No Answer Given	4	3

Question No. 2:

Would you prefer commuting to a centrally located campus?

	Number	Per cent
Yes	33	23
No	99	68
No Answer Given	13	9

Question No. 3:

Are you interested in taking one of the following programs?

	Number	Per cent	
College Preparatory	35	24	
Occupational	86	59	
No Answer	28	19	(NOTE: Some questionnaires contained two answers here)

A comparison of the answers to the same question by mail-in brochure responses and the high school seniors of Navajo County show marked differences in opinion.

Would you attend?

	Mail Per cent	High School Per cent
Yes	95	62
No	2	38

Would you prefer commuting?

Yes	23	53
No	68	47

Are you interested in taking one of the following:

College Prep	24	50
Occupational	59	50

Respondents were asked to indicate areas of interest for upgrading, professional, and other courses. A summary of these responses is as follows:

Area	No. of Requests
Agriculture Related - 11	
Forestry	4
Agriculture Mechanics	1
General Agriculture	5
Plant & Tree Identification	1
Business Related - 111	
Economics	1
Statistics	1
Secretarial	6
Bookkeeping	8
Typing	3
Business (Gen & Adm)	27
Data Processing	6
Income Tax Acctg.	5
Accounting	14
Shorthand	3
Steno Type	1
Business Machines	2
Merchandising	2
Advertising	1
Real Estate	6
Salesmanship	3
Management	11
Insurance	1
Public Relations	1
Business Law	7
Leadership	1
Marketing	1
Math & Science Related - 16	
Environmental Pollution	1
Biology	1
Fire Science	1
Math	3
Chemistry	3
Engineering	3
Industrial Water Chem.	1
Zoology	1
Geology	1
Physics	1
Medical & Related - 25	
Pharmacy	1
Hospital Adm.	1
Nursing	13
Denistry	1
Medicine	5
Human Anatomy	1
Diet Therapy	1
Optometry	2
Social & Behavioral Science - 31	
Psychology	3
Police Science	3
History	12
Archeology	5
Arizona History	2
Anthropology	2
The Occult	1
Eastern Religious Thought	1
Self Awareness	1
Adult Emancipation	1
English & Foreign Language - 38	
German	1
Spanish	7
Reading	3
English Composition	17
Journalism	1
Navajo	3
Literature	6
Home Economics - 31	
General Home Economics	13
Money Management	1
Tailoring	1
Sewing	5
Baking	1
Nutrician	2
Cooking	2
Upholstery	5
Cake Decorating	1

Area	No. of Requests
Fine Arts - 55	
Art	22
Silversmithing	2
Gemstone Cutting	2
Humanities	3
Music	14
Crafts	9
Theatre	3
Vocational and/or Technical - 40	
Air Conditioning	1
Automotive	8
Photography	3
Micro	1
AC - DC	1
Measurements	1
Electronics	4
Surveying	[illegible]
Industrial Education	1
Welding	4
Mineral Assaying	1
Plumbing	1
Carpenter	3
Electrical	4
Drafting	4
Civil Engineering	1
Motor Cycle Mechanics	1

Area	No. of Requests
Other - 26	
Elementary Education	10
Secondary Education	5
Graduate School	5
Sports	1
Physical Education	5

Conclusions:

Conclusion No. 1:

The questionnaires are evenly distributed in relation to population throughout the areas of the four planned "mini centers" of Northland Pioneer College.

Conclusion No. 2:

Although 23% of the respondents indicated that they would prefer commuting to a centrally located campus, this answer was often qualified by a statement indicating that if the campus was located in a certain place, they would prefer commuting. It is noteworthy that 95% of the people indicated they would attend Northland Pioneer College if they could attend in their own community.

Conclusion No. 3:

In regards to the question; are you interested in taking one of the following programs? The result, college prep. 24%, occupational 59%, is comparable to current plans in course development. Northland Pioneer College planners have established a goal of 60% of the program offerings in the occupational areas.

Conclusion No. 4:

There is some misinterpretation on the part of many Navajo County citizens as to the purpose and goals of the Community College. Many people ask for courses that are normally upper division and graduate level courses at the university.

Conclusion No. 5:

There are differences in opinion between the high school seniors in the county and the respondents on the brochure. If the brochure represents the opinions of adults, we can see that there is a communications gap between young people and their parents. NPC planners must keep this in mind.

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FEB 07 1975

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION